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| MAT 220: Math 4 Today  10 week: Occupational Math | | | |
| Learning Target | Unit Name | Instructional Resources | Vocabulary |
|  | Unit 1: Whole Numbers |  |  |
| I can...  -determine and explain the place value of a number.  -add, subtract, multiply and divide whole numbers. | Place value in Numbers  Adding Whole Numbers  Subtracting Whole Numbers  Multiplying Whole Numbers  Dividing Whole Numbers | Basic Occupational Math  Pages 1 - 27  \*See teaching suggestions 1, 3, 4  \*See teaching suggestions 3, 4  \*See teaching suggestions 2 | Place values,  Decimal, Sum, Minuend, subtrahend, difference, product, quotient, dividend, divisor |
|  | Unit 2: Fractions |  |  |
| I can...  -add, subtract, multiply and divide fractions.  -explain the difference between proper/improper fractions and their relation to 1.  -explain the size of fractions in relation to whole numbers.  -measure to the nearest 1/16 of an inch.  -create a scaled drawing. | Fraction Terminology  Adding Fractions  Subtracting Fractions  Multiplying Fractions  Dividing Fractions | Basic Occupational Math  Pages 29 – 46  \*See teaching suggestion 2  \*See teaching suggestion 2  \*See teaching suggestions 2, 3, 4 | Fraction, terms, numerator, denominator, proper fraction, improper fraction, mixed number, equivalent fractions, lowest terms, reducing, LCD, |
|  | Unit 3: Decimals and Percents |  |  |
| I can...  -add, subtract, multiply and divide decimals.  -explain the meaning of percent.  -find the percent of a number.  -convert between fractions, decimals and percent.  -measure to the nearest tenth, hundredth, etc.  -use decimals and precents in real life scenario | Introduction  Adding Decimals  Subtracting Decimals  Multiplying Decimals  Dividing Decimals  Operations with Fractions and Decimals,  Precents | Basic Occupational Math  Pages 47 – 75  \*See teaching suggestions 1, 3  \*See teaching suggestion 2  \*See teaching suggestions 1, 2  \*See teaching suggestion 2  \*See teaching suggestion 2  \*See teaching suggestion 1  \*See teaching suggestion 1  [End of Unit Mini Project](https://nfschools-my.sharepoint.com/:w:/g/personal/cdubois_nfschools_net/ES2hHy3v2Q9CtAMsSx7CgcABVngMZjv3A_Tzm-VdBo827g?e=UHiQOA) | Place values for decimals, percent, rounding, |
|  | Unit 4: Powers, Roots, and Geometric Figures |  |  |
| I can...  -correctly calculate powers and roots.  -identify geometric figures and distinguish the difference between 2D and 3D.  -find the perimeter and area of regular and irregular figures.  -find the area of shaded regions.  -apply perimeter, area and volume to real life scenarios. | Roots and Powers  Geometric Figures  Linear, Angular, and Circular Measurement  Area  Volume | Basic Occupational Math  Pages 77 – 95  \*See teaching suggestion 1  \*See teaching suggestions 1, 2, 4 | Power, base, exponent, squared, cubed, square root, cube root, 2D, 3D, geometric figures, perimeter, circumference, diameter, pi, radius, formula, altitude, volume. |
|  | Unit 5: Measuring Systems and Devices |  |  |
| I can...  -reason quantitatively and use units to solve problems  -use customary and metric measurement.  -determine which measuring device to use given a real-life situation.  -convert measurements within a given system. | Introduction  Measuring Systems  The Metric System  Measuring Devices | Basic Occupational Math  Pages 97 – 119  \*See teaching suggestions 2-8  \*See teaching suggestion 3 | Tolerance, range of tolerance, meniscus,  Customary system, metric system, decimal system (kilo-, deci-, centi-, milli-) cubic centimeter, divider, caliper, vernier caliper, gage blocks, protractor, |
|  | Unit 6: Mathematical Formulas; Ratios and Proportions |  |  |
| I can...  -use area, volume and other mathematical formulas to solve real life problems.  -apply ratios and proportions to real life scenarios.  -rearrange a given formula. | Mathematical Formulas  Ratios and Proportions | Basic Occupational Math  Pages 121 – 134  \*See teaching suggestions 2, 3  \*See teaching suggestions 1-3 | Equation, “same number”, “both sides”, ratio, proportion, extremes, means, |
|  | Unit 7: Graphing (optional, time permitting) |  |  |
| I can...  -determine the most appropriate graph to display given data.  -read a given graph.  -create a line graph.  -create a bar graph.  -create a circle graph. | Learning the Concept  Circle Graphs  Bar Graphs  Line Graphs | Basic Occupational Math  Pages 135 – 165  \*See teaching suggestions 1, 2, 3, 6, 7, 8, 9 | Graph, bar graph, discrete (discontinuous), continuous, axes (axis), continuous data, stretch modulus, independent variable, dependent variable, plotting points, best-fitting line, extrapolation, central angle, |
|  | Final Project |  |  |
| I can demonstrate my knowledge of occupational math through a real world research project. | Students will use technology to research mathematics in careers. | [Final Project](https://nfschools-my.sharepoint.com/:w:/g/personal/cdubois_nfschools_net/ERSIvp1DFTVPmTJuekCJtVIBFvQx6qq2ffJxdBJaofgJrw?e=bmPIIa) | All vocabulary from above |